

ABSTRACT

A method for improving the toughness of the surface of a ceramics product, characterized in that the ceramics product is substituted to a plastic working wherein a dislocated structure is formed in the sub-surface regions thereof, the structure being in a straight line form and covering uniformly over the whole of the ceramics product and having a dislocation density of 1×10^4 to $9 \times 10^{13} \text{ cm}^{-2}$, by the use of a jet material comprising fine particles having a convexly curved surface and having an average particle size of $0.1 \mu\text{m}$ to $250 \mu\text{m}$ and a Vickers hardness (HV) of 500 or more and of a hardness (HV) of the ceramics products +50 or less; and ceramics products which have a dislocated structure being in a straight line form and covering uniformly over the whole of the surface thereof and having a dislocation density of 1×10^4 to $9 \times 10^{13} \text{ cm}^{-2}$.